

**In the Claims:**

Please amend the claims as follows:

Claims 1-11 (Canceled).

12. (Original) A chemical imaging system comprising a near infrared imaging detection system and a visible imagery system.

13. (Original) The chemical imaging system of claim 12 wherein said near infrared imaging detection system comprises:

- a) an illumination source for illuminating an area of a sample using light in the near infrared radiation wavelength;
- b) a device for collecting a spectrum of near infrared wavelength radiation light transmitted, reflected, emitted or scattered from said illuminated area of said sample and producing a collimated beam therefrom;
- c) a near infrared imaging spectrometer for selecting a near infrared radiation image of said collimated beam; and
- d) detector for collecting said filtered near infrared images.
- e) an algorithm for processing the near infrared and visible image data.

14. (Original) The chemical imaging system of claim 12 wherein said visible imagery system comprises:

- a) an illumination source for illuminating an area of said sample using light in the visible wavelength; and
- b) a device for detecting said visible wavelength light from said illuminated area of said sample.

15. (Canceled).

16. (Canceled).

17. (Currently amended) A method for producing a volumetric image of a sample comprising the steps of:

- a) moving said sample relative to the ~~through an~~ objective;
- b) collecting images of said sample relative to ~~through~~ said objective in a plurality of focus depths; and
- c) processing said collected images to reconstruct an image of said sample.

Claims 18-20 (Canceled).

21. (New) The chemical imaging system of claim 14, wherein said visible imagery system comprises a microscope.

22. (New) The chemical imaging system of claim 14, wherein said visible imagery system comprises a macroscope.